

IN THE CLAIMS:

Please amend the claims as follows.

Claims 1-4 (Canceled).

Claim 5 (Currently Amended): ~~[[The]]~~ An organic semiconductor device ~~according to~~
~~claim 4, further~~ comprising:

at least p-type and n-type channel organic semiconductor elements each including
a pair of a source electrode and a drain electrode which are facing each other,
an organic semiconductor layer deposited between the source electrode and the
drain electrode such that a channel can be formed therebetween,

a gate electrode which applies a voltage through a gate insulating layer to the
organic semiconductor layer provided between the source electrode and the drain electrode; and

a wiring line which electrically connects the source or drain electrode of the p-type
channel organic semiconductor element to the source or drain electrode of the n-type channel
organic semiconductor element said organic semiconductor elements, the wiring line being made
of the same a material used for the source electrode or the drain electrode of one of the source
and drain electrodes of the p-type channel organic semiconductor element,

wherein the source electrode and the drain electrode of the p-type channel organic
semiconductor are made of materials having values of work function higher than those of the

source electrode and the drain electrode of the n-type channel organic semiconductor respectively,

wherein the organic semiconductor layers of the p-type and n-type channel organic semiconductor elements are made of p-type and n-type organic semiconductors respectively, and
wherein the source electrode and the drain electrode of the p-type channel organic semiconductor element have values equal or close to an ionization potential of the p-type organic semiconductor layer.

Claims 6-8 (Canceled).

Claim 9 (New): The organic semiconductor device according to claim 5, wherein the source electrode and the drain electrode of the n-type channel organic semiconductor element have values equal or close to an electron affinity of the n-type organic semiconductor layer.

Claim 10 (New): The organic semiconductor device according to claim 5, further comprising a second wiring line to be electrically connected to one of the gate electrode, the source and drain electrodes of the p-type or n-type channel organic semiconductor element at one end, the second wiring line being electrically connected to an organic electroluminescence element.

Claim 11 (New): The organic semiconductor device according to claim 5, wherein the wiring line electrically connects one of the source and drain electrodes of the p-type channel

organic semiconductor element to one of the source and drain electrodes of the n-type channel organic semiconductor element.

Claim 12 (New): An organic semiconductor device comprising:

at least p-type and n-type channel organic semiconductor elements each including

a pair of a source electrode and a drain electrode which are facing each other,

an organic semiconductor layer deposited between the source electrode and the drain electrode such that a channel can be formed therebetween,

a gate electrode which applies a voltage through a gate insulating layer to the organic semiconductor layer provided between the source electrode and the drain electrode; and

a wiring line which electrically connects said organic semiconductor elements, the wiring line being made of a material of one of the source and drain electrodes of the n-type channel organic semiconductor element,

wherein the source electrode and the drain electrode of the p-type channel organic semiconductor are made of materials having values of work function higher than those of the source electrode and the drain electrode of the n-type channel organic semiconductor respectively,

wherein the organic semiconductor layers of the p-type and n-type channel organic semiconductor elements are made of p-type and n-type organic semiconductors respectively, and

wherein the source electrode and the drain electrode of the p-type channel organic semiconductor element have values equal or close to an ionization potential of the p-type organic semiconductor layer.

Claim 13 (New): The organic semiconductor device according to claim 12, wherein the source electrode and the drain electrode of the n-type channel organic semiconductor element have values equal or close to an electron affinity of the n-type organic semiconductor layer.

Claim 14 (New): The organic semiconductor device according to claim 12, further comprising a second wiring line to be electrically connected to one of the gate electrode, the source and drain electrodes of the p-type or n-type channel organic semiconductor element at one end, the second wiring line being electrically connected to an organic electroluminescence element.

Claim 15 (New): The organic semiconductor device according to claim 12, wherein the wiring line electrically connects one of the source and drain electrodes of the p-type channel organic semiconductor element to one of the source and drain electrodes of the n-type channel organic semiconductor element.